Products...Target...Architecture Introduction

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1. VA Target Architecture Introduction

1.1. Definition and Purpose

The VA Target Architecture is a business driven vision that is intended to describe the future state of VA's business processes, and VA's application of technology to meet business objectives and service objectives to veterans. The Target Architecture focuses over a five to seven year planning horizon.

The Target Architecture describes investment initiatives that are currently expressed in the IT portfolio, as well as additional recommend actions that will be required to achieve the desired target end-state.

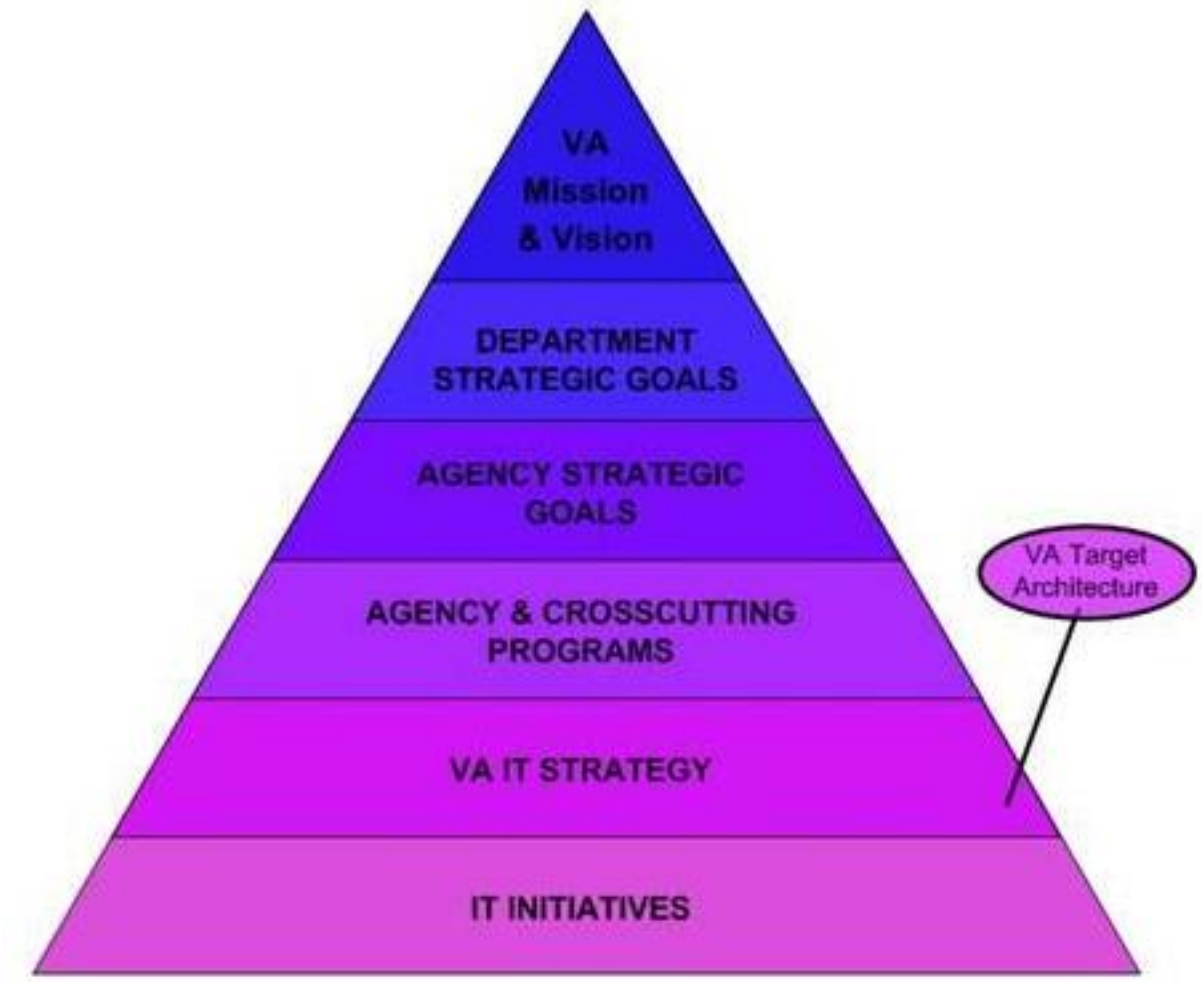
The primary purpose of the Target Architecture is to develop a course of action whereby VA's business process engineering and IT investments, over the course of the next five to seven years, are assured to contribute to VA's strategic goals and objectives.

The Target architecture translates VA business and service requirements into a set of target business processes that are, in turn, supported by a set of common technologies, reusable services, and shared data. These transformations are then implemented through business process re-engineering and IT system investments that collectively bring about the desired target end-state.

Throughout this process, architectural principals are articulated and observed, and performance metrics are assigned and measured to assure that ongoing activities achieve their intended outcomes. VA's Target Architecture is defined at the IT Strategy Layer of the VA Goal Hierarchy displayed in the following Figure 1.1 "VA Goal Hierarchy".

In previous EA versions, VA’s target architecture approach was developed and was submitted to the VA Enterprise Architecture Council and to the VA Administrations for review and adoption; it was then submitted to and accepted by OMB.

This current EA version focuses on the phased implementation of the same target architecture, as a series of segment architectures and supporting projects. This implementation approach is consistent with similar efforts across other federal government departments and agencies, and is consistent with OMB guidance and CIO Council best practices. VA’s Segment Architecture implementation approach has been developed in collaboration with effected stakeholders and is offered for review and adoption by VA business and Administration leadership.



EA Figure 1.1
VA Goal Hierarchy

1.2. Target Architecture Objectives

VA has adopted a service-oriented architecture that is focused upon achieving efficiency and

improved veteran service through:

- Reuse of sharable data to promote consistency and interoperability;
- Use of e-Gov and PMA Line of Business solutions, to eliminate redundant development;
- Veteran centric definition and implementation of business requirements into discrete, reusable components which can be reassembled and reused across multiple applications, business lines and Administrations to provide uniform outcomes from recurring functions;
- Adoption/exploitation of new technology to assure VA's leadership role in providing quality of service to veterans.

Over time, VA will refine these concepts to develop fully specified component based architecture in which:

- Sharable data stores will be defined and developed with standard interfaces for multiple application access;
- Process components will be designed and developed to provide common, reusable functionality across multiple business lines;
- Common infrastructure will be uniformly available and centrally managed under the auspices of business-driven communities of interest;
- Sharable components will be published, centrally maintained, and made available across government.

1.3. Target Architecture benefits

The Target Architecture will further VA strategic goals and objectives by:

- Providing opportunities to improve the efficiency and flexibility of VA's service to veterans. With this veteran centric, service oriented approach, veterans will enjoy improved simplicity and alternative modes of engagement in their interactions with VA as well as increased self-service options.
- Improving IT investment development and selection. The Target Architecture will clearly identify gaps in VA's system inventory and will enable stakeholders to recognize duplicative and overlapping investment proposals.
- Capitalizing on the use of existing data to meet new business requirements. Making existing data available as a sharable resource, and developing data requirements through communities of interest will reduce the cost of IT development and eliminate data conflict and

reconciliation cost.

- Reducing complexity and variability among VA's technical solutions. Standardizing on a reusable set of technical solutions and applying these consistently across the enterprise will improve interoperability and will reduce complexity in system maintenance and training.
- Creating a flexible and manageable IT investment base that can respond quickly and efficiently and with accountability to changing VA business needs.

1.4. Anticipated Return on Investment

The target architecture will specifically address:

- Substantially reducing the current number of 450 enterprise applications;
- Replacing the majority of stove-piped databases with sharable data stores;
- Reducing the total cost of ownership of VA IT assets;
- Shifting the majority of IT investment dollars from legacy maintenance to innovative development;
- Decreasing the time required to determine veteran eligibility;
- Decreasing veteran effort and inconvenience in interacting with VA;
- Increasing the number of veteran claims processed per day;
- Increasing self-service and remote accessibility to VA services;
- Increasing the efficiency and reducing cost of VA operations.

1.5. Target Architecture Development

The Target Architecture is developed through the following phases that are presented as sections within this document:

- **Target Architecture Strategy** – This section articulates the architectural principals objectives and vision of the five to seven year Target End-State;
- **Target Segment Architecture Development –** This section describes the various segment architectures, in detail, which are identified in the transition plan.
- **Target Architecture Transition Plan** – This section identifies provides an implementation

strategy, identifying those activities developed to achieve the end-state and identifies points along the way where specific objectives will have been achieved;

- **Target Architecture Transition Accomplishments** – This section traces progress in achieving portions of the Transition Plan and indicates when business outcome achievements can be realized;
- **Target Architecture Portfolio Abstracts** – This section provides a synopsis of each current IT development initiative, its dependencies and its proposed solution, and its contribution to the target vision;
- **Process Reuse, Redundancy and Gap Analysis** – This section provides a high-level review of current IT initiatives, it identifies initiatives that can reuse existing data, process, and infrastructure as well as initiatives that represent redundant activities. This section also identifies any area (or Gap) in which no IT investment current exists, to address a Target Architecture objective;
- **EA Portfolio Recommendations** – This section provides pro-active recommendations to VA business leadership for the additional IT investments needed to fill the Gap and achieve the target vision. It also identifies new portfolio projects that have managed to capture EA portfolio recommendations from prior Annual EA Assessments;
- **Target Sequencing Plan** – This section establishes a high-level development and deployment sequence or schedule between projects in the IT portfolio. This is expressed as a "herringbone" diagram positioning all initiatives along an implementation timeline. This section also identifies inter-project dependencies and identifies risks related to unfunded projects;
- **Target Alignment Analysis** – This section analyses the alignment of VA's current IT portfolio with the principals of utilizing Service Oriented Architectures, Shared Service Components, "Patterned" technical solutions, e-Gov solutions, PMA Lines of Business and shared data;
- **IPV6 Addendum** – This section examines VA's IPV6 Transition Initiative in detail. Since the Federal Government's transition to IPV6 is being coordinated at an inter-Department level, under the auspices of OMB and the CIO Council, it is necessary to provide a high degree of visibility of each organization's transition efforts in order to facilitate oversight and to proliferate lessons-learned;
- **Target Architecture Composite View** – This section compares the Target Architecture End-State with the current baseline architecture and with various transition stages along the path to Target End-State achievement. In so doing the target business, application and technical architectures are sketched-in, in advance of the IT investment that will design and implement them.

1.6. Target Architecture Audience

The VA target architecture is applicable to all VA Administrations, Staff Offices, and Business Lines. All VA stakeholders are encouraged to review, discuss, comment upon, and contribute to it:

- **Executives and Business Leadership** will find the architecture to be useful in providing decision support tools, and in supporting IT governance, project management oversight and ROI realization and measurement;
- The **CIO and IT Managers** will use the architecture to assure that IT investments are integrated, non-redundant and reusable;
- **Project Managers and IT Designers** will find guidance and direction for developing interoperable systems, components and sharable data stores, as well as assistance in meeting the requirements of the VA project oversight milestone process and the certification and accreditation process;
- **CPIC Analysts** will use the architecture to assure that proposed IT investments align with VA strategic objectives and performance measures;
- **OMB and GAO Analysts** will use the target architecture to validate VA's progress toward a strategic and business performance focused IT investment policy and execution.